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**REMARKS**

Claims 1-21 are currently pending in the subject application and are presently under consideration. A clean version of all pending claims is found at pages 2-8.

Favorable reconsideration of the subject patent application is respectfully requested in view of the comments herein.

**I. Rejection of Claims 1-2, 4, 7-10, and 17-21 Under 35 U.S.C. § 103(a)**

Claims 1-2, 4, 7-10, and 17-21 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Kemmer (US 4,234,831) in view of Spinner *et al.* (US 5,771,174) and Mizutani (US 5,532,533). It is submitted that this rejection should be withdrawn for at least the following reasons. The combination of Kemmer, Spinner, *et al.*, and Mizutani does not make obvious the claimed invention.

To reject claims in an application under § 103, an examiner must establish a *prima facie* case of obviousness. A *prima facie* case of obviousness is established by a showing of three basic criteria. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) ***must teach or suggest all the claim limitations***. See MPEP § 706.02(j). The ***teaching or suggestion to make the claimed combination*** and the reasonable expectation of success ***must both be found in the prior art and not based on applicant's disclosure***. See *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991) (emphasis added).

In particular, neither Kemmer (US 4,234,831), Spinner *et al.* (US 5,771,174), nor Mizutani (US 5,532,533) teach or suggest ***an integrated control system having a network interface and an associated rotary-linear motor integrated into a single module***, as recited in independent claims 1 and 17. In the Office Action dated April 21, 2003, the Examiner relies upon Spinner *et al.* to make up for the deficiencies of Kemmer with regards to a network interface for the integrated rotary-linear actuator system. In addition, the Examiner relies upon Mizutani to make up for the deficiencies of Kemmer and Spinner *et al.* with regards to the integration of the control system and the associated linear motor into a single

module. However, the subject claimed invention provides for an integrated rotary-linear actuator system comprising a control system. The claimed control system has a network interface operative to receive control information. By having the network interface within the control system, and having the control system incorporated into a single module as the rotary-linear motor, the subject invention can employ communicative control (*e.g.*, programming) and/or diagnostic information (*e.g.*, monitoring) between the single module (*e.g.*, the control system containing the network interface, integrated with the rotary-linear motor) and an associated network without a separate network interface. Moreover, the control system having the network interface, incorporated with the rotary-linear motor into single module can provide multiple modules to communicate *via* the associated network without each module having a separate entity network component.

There is nothing in Spinner, *et al.* or Mizutani that teaches or suggests integrating a control system including a network interface and an associated rotary-linear motor into one module. Rather, Spinner *et al.* illustrates a host control system, a gateway, and a plurality of actuator controllers as separate modules. Whereas, Mizutani illustrates a control apparatus integrated with a servo motor. Therefore, Spinner *et al.* and/or Mizutani do not make up for the deficiencies of Kemmer.

In view of at least the aforementioned reasons, the subject invention as recited in independent claims 1 and 17 (of which claims 2, 4, 7-10, 18-21 depend upon) is not obvious over Kemmer, Spinner *et al.*, and Mizutani, taken individually or in combination. Accordingly, withdrawal of this rejection and allowance of claims 1-2, 4, 7-10, and 17-21 are respectfully requested.

## **II. Rejection of Claims 11-15 Under 35 U.S.C. §103(a)**

Claims 11-15 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Sudo *et al.* (US 4,644,205) in view of Spinner *et al.* (US 5,771,174) and Mizutani (US 5,532,533). It is submitted that this rejection should be withdrawn for at least the following reasons. The combination of Sudo *et al.*, Spinner *et al.*, and Mizutani does not make obvious the claimed invention. Specifically, Spinner *et al.* and Mizutani do not make up the deficiencies of Sudo *et al.* with regards to a control system providing a network interface and

the associated rotary-linear motor integrated into one module. As discussed above, the subject claimed invention provides for a control system comprising a network interface in which the control system and the associated rotary-linear motor are integrated into one module. There is nothing in Sudo *et al.*, Spinner *et al.*, and/or Mizutani that discloses, teaches, or suggests a control system providing a network interface and the associated rotary-linear motor being integrated into one module.

Thus, in view of at least the aforementioned reasons, the subject invention as recited in claim 11 is not obvious over Sudo, Spinner *et al.* and Mizutani, taken individually or in combination. Claims 12-15 depend from claim 11. Accordingly, withdrawal of this rejection and allowance of claims 11-15 is respectfully requested.

### **III. Rejection of Claims 1-10 and 16-21 Under 35 U.S.C. §103(a)**

Claims 1-10 and 16-21 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Sudo *et al.* (US 4,644,205) in view of Spinner *et al.* (US 5,771,174), Gerard (US 4,751,437) and Mizutani (US 5,532,533). It is submitted that this rejection should be withdrawn for at least the following reasons. The combination of Sudo *et al.*, Spinner *et al.*, Gerard, and Mizutani does not make obvious the claimed invention.

As discussed *supra*, the subject claimed invention is a control system providing a network interface in which the control system and the associated rotary-linear motor are integrated into one module. There is nothing in Sudo *et al.*, Gerard, Spinner *et al.*, and/or Mizutani that discloses, teaches, or suggests a control system providing a network interface and the associated rotary-linear motor being integrated into one module.

Thus, in view of at least the aforementioned reasons, the subject invention as recited in independent claims 1, 16, and 17 is not obvious over Sudo, Spinner *et al.*, Gerard and Mizutani, taken individually or in combination. Claims 2-10 and 18-21 depend from claims 1, 16, and 17 respectively. Accordingly, withdrawal of this rejection and allowance of claims 11-15 is respectfully requested.

**IV. Rejection of Claims 1-4, 7-10 and 16-21 Under 35 U.S.C. §103(a)**

Claims 1-4, 7-10 and 16-21 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Kemmer (US 4,234,831) in view of Lee (US 4,692,678) and Mizutani (US 5,532,533). It is submitted that this rejection should be withdrawn for at least the following reasons. The combination of Kemmer, Lee, and Mizutani does not make obvious the claimed invention. The subject claimed invention is a control system providing a network interface in which the control system and the associated rotary-linear motor are integrated into one module. There is nothing in Kemmer, Lee, and/or Mizutani that discloses, teaches, or suggests a control system providing a network interface and the associated rotary-linear motor being integrated into one module. Examiner relies on Mizutani to make up for the deficiencies with regards to the control system and the associated rotary-linear motor being integrated into one module. However, the subject invention integrates the control system having a network interface and the associated rotary-linear motor into one module. (*See* Claims 1, 16, and 17).

Thus, in view of at least the aforementioned reasons, the subject invention as recited in independent claims 1, 16, and 17 is not obvious over Kemmer, Lee and Mizutani, taken individually or in combination. Claims 2-10 and 18-21 depend from claims 1, 16, and 17 respectively. Accordingly, withdrawal of this rejection and allowance of claims 1-4, 7-10, and 16-21 is respectfully requested.

**V. Rejection of Claims 11-15 Under 35 U.S.C. §103(a)**

Claims 11-15 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Sudo *et al.* (US 4,644,205) in view of Lee (US 4,692,678) and Mizutani (US 5,532,533). It is submitted that this rejection should be withdrawn for at least the following reasons. The combination of Sudo *et al.*, Lee, and Mizutani does not make obvious the claimed invention. The subject claimed invention is a control system providing a network interface in which the control system and the associated rotary-linear motor are integrated into one module. There is nothing in Sudo *et al.*, Lee, and/or Mizutani that discloses, teaches, or suggests a control system having a control system providing a network interface and the associated rotary-linear motor being integrated into one module. Rather, Lee merely illustrates an analog-to-digital

interface X which can be used in conjunction with sensing means 2 to provide an output to processing means W. As previously noted above, Mizutani does not make up for the deficiencies in regards to integrating a control system providing a network interface and the associated rotary-linear motor into one module.

Thus, in view of at least the aforementioned reasons, the subject invention as recited in claim 11 is not obvious over Sudo *et al.*, Lee, and Mizutani, taken individually or in combination. Claims 12-15 are dependant upon claim 11. Accordingly, withdrawal of this rejection and allowance of claims 11-15 is respectfully requested.

#### VI. CONCLUSION


The present application is believed to be in condition for allowance in view of the above comments and amendments. A prompt action to such end is earnestly solicited.

In the event any fees are due in connection with this document, the Commissioner is authorized to charge those fees to Deposit Account No. 50-1063.

Should the Examiner believe a telephone interview would be helpful to expedite favorable prosecution, the Examiner is invited to contact applicant's undersigned representative at the telephone number listed below.

Respectfully submitted,

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